



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/070,025	05/14/2002	Christl Lauterbach	32226.17	5861

7590 06/03/2003  
Jeffrey R Stone  
Briggs & Morgan  
2200 First National Bank Building  
332 Minnesota Street  
Saint Paul, MN 55101

EXAMINER

CHANG, DANIEL D

ART UNIT	PAPER NUMBER
----------	--------------

2819

DATE MAILED: 06/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

A 7

**Office Action Summary**

Application No.

10/070,025

Applicant(s)

LAUTERBACH ET AL.

Examiner

Daniel D. Chang

Art Unit

2819

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --****Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 April 2002.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 7, 16 and 21-26 is/are rejected.
- 7) ☒ Claim(s) 5, 6, 8-15 and 17-20 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 May 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>7</u> . | 6) <input type="checkbox"/> Other:  |

***Acknowledgement***

Receipt is acknowledged of the Preliminary Amendment filed April 15, 2002.

***Claim Objections***

Claims 1, 3, 7, 21, 22, 24, and 26 are objected to because of the following:

In claim 1, line 1, "Electronic circuit" appears to be --An electronic circuit--; on line 8, "can be" should be changed to --is-- and on line 11, "may be or" should be deleted in order to particularly point out and distinctly claim the subject matter.

In claim 3, line 2; in claim 7, line 2; in claim 21, line 2; and in claim 22, lines 3 and 4, the word, "can be" should be replaced by --is--; and in claim 22, line 2; and in claim 24, line 1, the word, "can" should be deleted in order to particularly point out and distinctly claim the subject matter.

Claim 26 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Also, on line 2, "can generate or" should be deleted in order to particularly point out and distinctly claim the subject matter.

Appropriate correction is required.

***Claim Rejections - 35 USC § 101***

Claims 22-26 are rejected under 35 U.S.C. 101 because the claimed invention is not supported by either a specific asserted utility or a well established utility.

Art Unit: 2819

The recitation, "The use of ferroelectric flip-flops for electronic circuits" is indefinite because it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claims 22-26 are also rejected under 35 U.S.C. 112, first paragraph. Specifically, since the claimed invention is not supported by either a specific asserted utility or a well established utility for the reasons set forth above, one skilled in the art clearly would not know how to use the claimed invention.

For the purposes of expediting prosecution on the merits of the claims, the examiner has attempted to construe the claims to the extent possible for the following art rejection.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4, 7, 16, 21, 22, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eschmann et al. (EP 549,519 A1) in view of Ooms et al. (US 5,923,184).

Eschmann discloses all the features of the claimed invention (see Fig. 2) but does not disclose at least one ferroelectric flip-flop.

However, Ooms et al. teaches a non-volatile ferroelectric flip-flop (see fig. 5) for the purpose of programming and storing data.

Art Unit: 2819

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to have provided the circuit of Eschmann with the ferroelectric flip-flop as taught by Ooms et al. in order to program and store the data without losing the data when there is a power failure.

***Allowable Subject Matter***

Claims 5, 6, 8-15, and 17-20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel D. Chang whose telephone number is (703) 306-4549. The examiner can normally be reached on Monday through Friday.

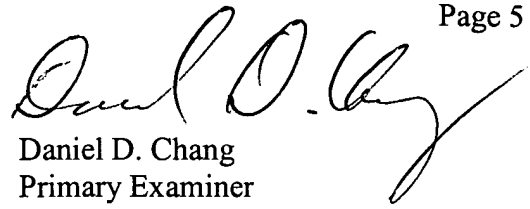
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael J. Tokar can be reached on (703) 305-3493. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9318 for regular communications and (703) 872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Application/Control Number: 10/070,025

Art Unit: 2819

Page 5

A handwritten signature in black ink, appearing to read "Daniel D. Chang", with a long, sweeping horizontal stroke extending to the right.

Daniel D. Chang  
Primary Examiner  
Art Unit 2819

DC  
May 29, 2003

**DANIEL CHANG**  
**PRIMARY EXAMINER**